

CLAIMS

We claim:

1. An elevator system including an elevator car movable within a
5 hoistway comprising:

a machine for driving an elevator car through a hoistway;

a counterweight mounted in the hoistway and having a deflection
sheave;

10 an elevator car mounted for movement in the hoistway and having a
deflection sheave; and

said machine having a drive sheave, said drive sheave, and said
deflection sheaves all having parallel axes of rotation, and a connecting member
passing over said deflection sheaves and said drive sheave to drive said counterweight
and said car within the hoistway, said machine mounted in the hoistway, and in a
15 space between said car and a wall defining the hoistway, such that said machine is not
directly above said car.

2. An elevator system as set forth in Claim 1, wherein there are a pair of
opposed guide rails for guiding an elevator car, said guide rails being mounted at
20 opposed longitudinal ends of an axis of rotation of said drive sheave.

3. An elevator system as set forth in Claim 2, wherein a bedplate
connects said opposed guide rails and said machine is mounted on said bedplate.

25 4. An elevator system as set forth in Claim 2, wherein said elevator car is
cantilever mounted from said guide rails.

5. An elevator system as set forth in Claim 4, wherein said guide rails
have guiding surfaces at longitudinally outer sides and said elevator car is connected
30 on said outer guide surfaces.

6. An elevator system as set forth in Claim 5, wherein said counterweight is guided on longitudinally inner guide rails.

5 7. An elevator system as set forth in Claim 6, wherein said guide rails for said counterweight are positioned to be closer to a wall than said guide rails for said elevator car.

8. An elevator system as set forth in Claim 5, wherein said elevator car has a vertically uppermost point of travel which is vertically above said machine.
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9. An elevator system as set forth in Claim 1, wherein said connecting member is connected to a dead end hitch at each of two opposed ends and on said bedplate.

15 10. An elevator system as set forth in Claim 1, wherein said deflection sheave associated with said elevator car is positioned between an outer edge of a cabin for receiving passengers in said car, and the wall which will define the hoistway.

20 11. An elevator system as set forth in Claim 1, wherein said drive sheave and said deflection sheaves all are at generally equal axial positions along their respective parallel axes of rotation.